AMENDMENTS TO THE CLAIMS

1. (Currently Amended) Method of producing polymers in a gas phase polymerization reactor, which has an elongated reactor body, defined by reactor walls, and an essentially vertically disposed central axis, the reactor comprising an upper part, in which a reactor bed of fluidized catalyst particles can be formed, and a lower part, in which monomer gas can be introduced, said upper and said lower parts being separated by a distribution plate, which promotes distribution into the fluidized bed of monomers flowing from the lower part into the upper part, according to which method

- a gas stream containing ~~monomer(s)~~ one or more monomers is fed into the lower part of the reactor,
- the ~~monomer(s) is (are)~~ monomers are polymerized on the catalyst particles to form a polymer,
- unreacted monomers are withdrawn, and
- the polymer is recovered ~~and, optionally, subjected to further treatment~~,

~~characterized by~~

- ~~conducting at least a part of~~ wherein the gas stream is fed into the lower part of the reactor along at least 80% of the periphery of the inside of the reactor walls past the abutting distribution plate to prevent the formation of stagnant zones in the fluidized bed at the reactor walls in the vicinity of the distribution plate, and
- ~~using~~ a single distribution plate is used in the reactor body.

2. (Cancelled)

3. (Currently amended) The method according to claim 1, wherein [[a]] the gas stream is conducted along 90 – 100 % of the periphery of the inside of the reactor wall abutting the distribution plate.

4. (Previously Presented) The method according to claim 1, wherein the gas stream is conducted along the periphery of the inside of the reactor wall through an essentially annular opening formed between the outer edge of the distribution plate and the inside of the reactor wall.

5. (Currently Amended) The method according to claim 4, wherein the annular opening has a width of at least 1 mm~~, preferably 2 to 20 mm, in particular about 2 to 10 mm~~.

6. (Currently amended) The method according to claim 1, wherein the flow rate of the gas stream conducted along the inside of the reactor wall is about 1 to 200 cm/s~~, preferably 10 to 100 cm/s, in particular 30 to 70 cm/s~~.

7. (Previously Presented) The method according to claim 1, wherein the distribution plate has openings, which are not covered by overcaps to allow for free flow of gas through the openings from the lower part of the reactor into the upper part.

8. (Previously Presented) The method according to claim 1, wherein the openings of the distribution plate are essentially circular in cross-section.

9. (Currently amended) The method according to claim 1, wherein the part of the gas stream conducted along the inside preferably forms ~~an essential part, typically~~ at least 10 %~~, preferably at least 30 %, in particular at least 40 %,~~ of the total flow of gas through the plate.

10. (Currently Amended) Apparatus for producing polymers by gas phase polymerization, comprising

- an elongated reactor body, defined by reactor walls, said reactor body having an essentially vertically disposed central axis,

- the reactor comprising an upper part, in which a reactor bed of fluidized catalyst particles can be formed, and
- a lower part, in which monomer gas can be introduced,
- said upper and said lower parts being separated by a distribution plate, which promotes distribution into the fluidized bed of monomers flowing from the lower part into the upper part,

– at least one feed nozzle in the lower part of the reactor for introducing a gas stream containing ~~monomer(s)~~ one or more monomers into the lower part of the reactor,
– an outlet nozzle in the upper part of the reactor for recovering unreacted ~~monomer(s)~~ monomers, and
– a discharge device in the upper part of the reactor for recovering polymer product from the reactor,

~~characterized in that~~ wherein

– the distribution plate is fitted inside the reactor body in such a way that an essentially annular opening is formed between the periphery of the plate edge and the reactor wall to allow for the flow of at least 80% of the gas stream fed into the lower part of the reactor along the inside of the reactor walls past the distribution plate, and
– there is a single distribution plate fitted inside the reactor body.

11. (Currently Amended) The apparatus according to claim 10, wherein reactor body has a circular cross-section transversal to the central axis and the distribution plate has a circular periphery, the diameter of the distribution plate being at least 1 mm~~, preferably about 2 to 20 mm,~~ smaller than the inner diameter of the reactor body.

12. (Previously Presented) The apparatus according to claim 10, wherein the openings of the distribution plate have a circular cross-section transversally to the central axis of the reactor.

13. (New) The method according to claim 4, wherein the annular opening has a width of at least 2 to 20 mm.

14. (New) The method according to claim 4, wherein the annular opening has a width of at least 2 to 10 mm.

15. (New) The method according to claim 1, wherein the flow rate of the gas stream conducted along the inside of the reactor wall is about 10 to 100 cm/s.

16. (New) The method according to claim 1, wherein the flow rate of the gas stream conducted along the inside of the reactor wall is about 30 to 70 cm/s.

17. (New) The method according to claim 1, wherein the part of the gas stream conducted along the inside preferably forms at least 40 % of the total flow of gas through the plate.

18. (New) The apparatus according to claim 10, wherein reactor body has a circular cross-section transversal to the central axis and the distribution plate has a circular periphery, the diameter of the distribution plate being at least about 2 to 20 mm smaller than the inner diameter of the reactor body.